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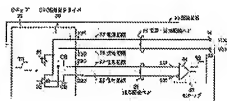
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(54) ELECTRONIC DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To supply to a differential driver at a high speed without damping complementary signal energy and contrive to increase a speed in transmission of a complementary transmission digital signal to be output by a method wherein first and second power supply wirings for supplying first and second power supply voltages to the differential driver are set as an iso-length parallel wiring.

SOLUTION: A signal wiring pair 21 comprising an iso-length parallel power supply wiring 27 having a large coupling coefficient, a power supply and ground wiring pair 26 comprising a ground wiring 28, and iso-length parallel signal wirings 22, 23 having a large coupling coefficient is provided on a wiring substrate 20. Here, characteristic impedances of the power supply and ground wiring pair 26 and the signal wiring pair are equalized. And, on-resistance of a CMOS differential driver 30 is matched to the characteristic impedance of the signal wiring pair 21 to absorb a reflection complementary transmission digital signal CS-/CS reversely transmitted in the signal wiring pair 21. Thus, a waveforms deformation is eliminated, and the complementary transmission digital signal CS-/CS can be transmitted at a speed near to a speed of lights.



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(54) 【発明の名称】 電子装置

(57) 【要約】

【課題】 ドライバから出力される送信デジタル信号を信号配線を介してレシーバに伝送する伝送回路を有する電子装置に関し、信号伝送の高速化を図る。

【解決手段】 配線基板20に形成する電源配線27及び接地配線28をカップリング係数を大とする等長平行配線からなるペア配線構造とし、CMOS差動ドライバ30に供給すべき相補信号エネルギーに対して電源・接地配線ペア26を電磁界がほぼ閉じた伝送線路として機能させる。

本発明の第1実施形態の電気図

